

# Notice of Allowability

Application No.

10/019,828

Examiner

Ronald Baum

Applicant(s)

LUO ET AL.

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/19/07.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

NASSER MOAZZAMI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

  
5/27/07

## DETAILED ACTION

### *Examiner's Statement of Reasons for Allowance*

1. Claims 1-13 are allowed over prior art.
2. This action is in reply to applicant's correspondence of 19 March 2007.
3. The following is an examiner's statement of reasons for the indication of allowable claimed subject matter.
4. As per claims 1, 2, 3, 9, 11 and 13 generally, prior art of record, Collberg et al, U.S. Patent No. 6,668,325 B1, fails to teach alone, or in combination, at the time of the invention, the features as discussed and remarked upon in the response of 19 March 2007 to office action of 12/19/2006.

Specifically, (as per claim 1, for example) prior art dealing with various object oriented programming languages (i.e., Java) code decompiling aspects (i.e., associated thwarting via obfuscation), is generally known to exist per se, (i.e., Miecznikowski, J., et al, 'Decompiling Java Bytecode: Problems, Traps and Pitfalls', 2002, Sable Research Group, School of Computer Science, McGill University, entire document, [www.sable.mcgill.ca/publications/papers/2002-2/sable-paper-2002-2.ps.gz](http://www.sable.mcgill.ca/publications/papers/2002-2/sable-paper-2002-2.ps.gz)), is generally known per se. Nowhere in the prior art is found collectively the *italicized* claim elements (obfuscation of the referencing of an objects data (the data object and field symbolic referencing) via a second objects symbolic name and secondary referencing information (i.e., array index) *not* inclusive of the data symbolic field name), at the *time of the invention*, serving to patently distinguish the invention from said prior art;

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“1. A method of obfuscating executable code that uses a first reference including a symbolic object name and a symbolic field name to reference a field containing data the method comprising the steps of:

defining an object

wherein the *field is not referenced by*

*a symbolic field name*; and

*replacing the first reference with a second reference that*

*references the field by*

*the defined object's name and*

*the field as required by the defined object.”*

5. Dependent claims 4-8, 10 and 12 are allowable by virtue of their dependencies.

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*Conclusion*

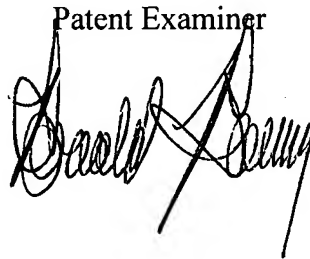
6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861 and unofficial email is Ronald.baum@uspto.gov. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami, can be reached at (571) 272-4195. The Fax number for the organization where this application is assigned is **571-273-8300**.

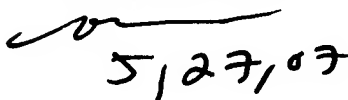
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Baum

Patent Examiner



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